

REMARKS

Applicants have added new claims 60 and 61, amended claims 1, 6, 14, 19, 27, 36, 55-56, 58, and 59 as set forth above and cancelled claims 29, 30, and 39. Applicants note with appreciation the Office's indication that claims 9-13, 22-26, 31-35, and 40-53 are allowable over the prior art of record and claims 30, 39, and 58-59 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. In view of the following remarks, reconsideration of the outstanding office action is respectfully requested.

The Office has rejected claims 1-5, 7-8, 14-18, and 20-21 are rejected under 35 U.S.C. 102(e) as being anticipated by US Patent Publication No. 2001/0009541 to Ueyanagi (Ueyanagi) and has rejected claims 1-3, 5-7, 14-16, 18-20, 27-29, 36-38, and 54-57 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent No. 4,994,818 to Keilmann (Keilmann). The Office asserts Ueyanagi in (figs. 1 or 6) discloses: an optical element 6; at least one structure 8 at least partially in a non-opaque portion of the optical element and at least adjacent a surface of the optical element; and a source 2 of light with a mode profile that provides an electric field which has a vector component substantially perpendicular to the surface of the optical element, the source positioned to propagate at least a portion of the light through the optical element onto an object 12, the structure 8 enhancing the electric field of the light which optically interacts with the object. See e.g. [0042], [0044], [0055], and [0059]-[0063]. Additionally, the Office asserts Keilmann discloses: an optical element 10; at least one structure 20 at least partially in a non-opaque portion 22 of the optical element and at least adjacent a surface of the optical element, wherein the structure has at least one pointed tip; and a source of light 16 with a mode profile that provides an electric field which has a vector component substantially perpendicular to the surface of the optical element, the source positioned to propagate at least a portion of the light through the optical element onto an object, the structure 20 enhancing the electric field of the light which optically interacts with the object. The Office asserts that the non-opaque portion in Keilmann includes a material (polyethylene in the reference example) which insulates the

structure 20 and which is transparent at the wavelength of light 16 at col. 3 line 29 to col. 4 line 2.

Neither Ueyanagi nor Keilmann, alone or in combination, disclose or suggest, “at least one structure at least partially in a non-opaque portion of the optical element and at least adjacent a surface of the optical element, wherein the structure is elongated with opposing narrow ends, one of the opposing narrow ends is adjacent the surface of the optical element and the other opposing narrow end is further from the surface than the one of the opposing narrow ends and is spaced in from other surfaces of the optical element” as recited in claim 1 or “providing an optical element with at least one structure at least partially in a non-opaque portion of the optical element and at least adjacent to a surface of the optical element, wherein the structure is elongated with opposing narrow ends, one of the opposing narrow ends is adjacent the surface of the optical element and the other opposing narrow end is further from the surface than the one of the opposing narrow ends and is spaced in from other surfaces of the optical element” as recited in claim 14.

With respect to independent claims 1 and 14, the Office’s attention is respectfully directed to FIGS. 1A-1F, 3A, and 6 in Ueyanagi which illustrates a member or members 8, but does not disclose that the member is elongated and has at least one pointed tip at one end adjacent the surface of the optical element and an opposing end from the pointed tip which is further from the surface than the pointed tip. Additionally, as clearly illustrated in FIGS. 2 and 3 in Keilmann, the L-shaped end of the rod 30 extends out from the dielectric holding body 20 and thus is not spaced in from other surfaces of the dielectric holding body 20. Further, with respect to independent claims 27 and 36, Applicants have amended claims 27 and 36 to respectively incorporate all of the limitations of objected to, but allowable claims 30 and 39 and any intervening claims.

As set forth in paragraph 32 in the above-identified patent application, “The electric field component of the focused light 24 perpendicular to the surface of the solid immersion lens 16(1), referred to as longitudinal field, creates a highly localized, enhanced field 34 at the surface 28 of the lens 16(1) by the structure 18(1). Since the structure 18(1) is in the vicinity of the surface 26 of the object 12, the enhanced field 34 protrudes into the

space outside the solid immersion lens 16(1) thereby enabling a highly localized interaction with the surface 26 of the object 12 which is close by. The lateral extent of the enhanced field 34 is smaller than the size of diffraction limited illumination and can reach down to about ten nm.” Accordingly, with the claimed configuration and location of the elongated structure in the optical element, the enhanced field is desirably formed close to the surface of the object.

In view of the foregoing amendments and remarks, the Office is respectfully requested to reconsider and withdraw the rejection of claims 1, 14, 27, and 36. Since claims 2-8, 54, and 55 depend from and contain the limitations of claim 1, claims 15-21, 56, and 57 depend from and contain the limitations of claim 14, claims 28 and 29 depend from and contain the limitations of claim 27, and claims 37 and 38 depend from and contain the limitations of claim 36, these claims are distinguishable over the cited references and are patentable in the same manner as claims 1, 14, 27, and 36.

Additionally, Keilmann does not disclose or suggest, “wherein the elongated structure extends in a direction which is substantially perpendicular to the surface of the optical element and wherein the optical element is a solid immersion lens” as recited in claims 55 and 57. The Office’s attention is respectfully directed to claims 55 and 57 and col. 3, lines 47-48 in Keilmann which illustrate and disclose that the body 22 is a double-cone-shaped body of low loss dielectric. Nowhere does Keilmann teach or suggest that the structure is in a solid immersion lens as claimed. Accordingly, in view of the foregoing amendments and remarks, the Office is respectfully requested to reconsider and withdraw the rejection of claims 55 and 57.

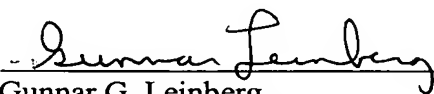
The Office has rejected claims 30, 39, and 58-59 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Accordingly, Applicants have amended independent claims 27 and 36 to respectively incorporate all of the limitations of claims 30 and 39 and any intervening claims and have rewritten claims 58 and 59 in independent form including all of the limitations of the base

claim and any intervening claims. In view of the foregoing amendments and remarks, the Office is respectfully requested to reconsider and withdraw this objection.

In view of all of the foregoing, Applicants submit that this case is in condition for allowance and such allowance is earnestly solicited.

Respectfully submitted,

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